



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0495; Product Identifier 2017-NM-017-AD; Amendment 39-19222; AD 2018-06-02]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440), Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. This AD was prompted by development of a modification to prevent uncommanded rudder movement during flight. This AD requires modifying the wiring harness of the yaw damper control system. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email ac.yul@aero.bombardier.com; Internet: <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0495.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0495; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Section, New York ACO Branch, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7318; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440), Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. The NPRM published in the Federal Register on May 31, 2017 (82 FR 24897) (“the NPRM”). The NPRM was prompted by development of a modification to prevent uncommanded rudder movement during flight. The NPRM proposed to require modifying the wiring harness of the yaw damper control system. We are issuing this AD to prevent uncommanded rudder movement and consequent loss of the ability to control the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2017-06, effective February 14, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440), Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. The MCAI states:

[Canadian] AD CF-2013-13 was issued on 28 May 2013 [related to FAA AD 2013-14-11, Amendment 39-17516 (78 FR 44871, July 25, 2013) (“AD 2013-14-11”)] to mandate the introduction of an emergency procedure to the Aeroplane Flight Manual to address the uncommanded rudder movement.

Since the original issue of [Canadian] AD CF-2013-13, Bombardier Aerospace has developed a wiring modification for the yaw damper control system to prevent uncommanded movement of the rudder [and consequent loss of the ability to control the airplane].

This [Canadian] AD mandates the wiring modification for the yaw damper control system * * *.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-20**-****.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

The Air Line Pilots Association, International (ALPA), agreed with the intent of the NPRM.

Request to Clarify Credit for Certain Service Information

SkyWest Airlines and Ahmad Lababidi asked that we revise paragraph (h) of the proposed AD to clarify the credit language for accomplishing the engineering orders in conjunction with the referenced service information. Ahmad Lababidi stated that Service Non-Incorporated Engineering Order (SNIEO) K601R50211 S02, dated October 31, 2014, was issued for certain airplane configurations where the wire connector was changed from pin type to socket type. The commenters added that SNIEOs K601R50211 S03, dated April 21, 2015, and S04, dated April 24, 2015, were issued to clarify certain splicing, capping, and stowing locations, and to reduce the work hours for accomplishing the actions specified in the service bulletin. The commenters added that it is not

necessary to do the engineering orders in conjunction with the referenced service information. SkyWest reported accomplishing the modification on some airplanes using only the applicable service bulletin without any reference to the SNIEOs specified in paragraph (h) of the proposed AD.

We agree with the commenters' requests for the reasons provided. We have revised paragraphs (h)(1)(i) and (h)(1)(ii) of this AD to remove reference to the SNIEOs, which are not required to be used in conjunction with the referenced service information.

Request to Revise Parts Installation Limitations Paragraph

Air Wisconsin asked that we revise paragraph (i) of the proposed AD (Parts Installation Limitations) to exclude parts on which the actions in the referenced service information have been done.

We acknowledge the commenter's request. However, paragraph (i) of this AD already prohibits installation of a yaw damper actuator ... "unless it has been modified in accordance with the applicable service information specified in table 1 to paragraph (g) of this AD." Since existing language meets the intent of the commenter's request, we have not changed this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously, and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

Bombardier has issued Service Bulletin 601R-22-017, Revision C, dated May 11, 2016; and Service Bulletin 670BA-22-007, Revision A, dated February 16, 2016. This service information describes procedures for modifying the wiring harness of the yaw damper control system. These documents are distinct since they apply to different airplane models. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 1,006 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Wiring modification	5 work-hours X \$85 per hour = \$425	Up to \$39	Up to \$464	Up to \$466,784

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866,
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
3. Will not affect intrastate aviation in Alaska, and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2018-06-02 Bombardier, Inc.: Amendment 39-19222; Docket No. FAA-2017-0495; Product Identifier 2017-NM-017-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440), Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 22, Auto Flight.

(e) Reason

This AD was prompted by development of a modification to prevent uncommanded rudder movement during flight. We are issuing this AD to prevent uncommanded rudder movement and consequent loss of the ability to control the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Modification

Within 6,600 flight hours or 36 months after the effective date of this AD, whichever occurs first: Modify the wiring harness of the yaw damper control system, in accordance with the applicable service information specified in table 1 to paragraph (g) of this AD.

Table 1 to paragraph (g) of this AD

Airplane Model	Airplane Serial Numbers	Applicable Service Bulletin
CL-600-2B19	7002 through 8999 inclusive	Bombardier Service Bulletin 601R-22-017, Revision C, dated May 11, 2016
CL-600-2C10	10002 through 10344 inclusive	Bombardier Service Bulletin 670BA-22-007, Revision A, dated February 16, 2016
CL-600-2D15 and CL-600-2D24	15001 through 15400 inclusive	

(h) Credit for Previous Actions

(1) This paragraph provides credit for actions required by paragraph (g) of this AD for Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, if those actions were performed before the effective date of this AD using the service information specified in paragraph (h)(1)(i), (h)(1)(ii), or (h)(1)(iii) of this AD.

(i) Bombardier Service Bulletin 601R-22-017, dated September 24, 2014.

(ii) Bombardier Service Bulletin 601R-22-017, Revision A, dated February 26, 2015.

(iii) Bombardier Service Bulletin 601R-22-017, Revision B, dated July 16, 2015.

(2) This paragraph provides credit for actions required by paragraph (g) of this AD for Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 670BA-22-007, dated October 15, 2014.

(i) Parts Installation Limitations

As of 24 months after the effective date of this AD, no person may install, on any airplane, a yaw damper actuator having part number 622-9968-001, unless it has been

modified in accordance with the applicable service information specified in table 1 to paragraph (g) of this AD.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the New York ACO, send it to ATTN: Program Manager, Continuing Operational Safety, New York ACO Branch, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2017-06, effective February 14, 2017, for related information. This MCAI may be found in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0495.

(2) For more information about this AD, contact Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Section, New York ACO Branch, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7318; fax 516-794-5531.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (1)(3) and (1)(4) of this AD.

(I) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 601R-22-017, Revision C, dated May 11, 2016.

(ii) Bombardier Service Bulletin 670BA-22-007, Revision A, dated February 16, 2016.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email ac.yul@aero.bombardier.com; Internet: <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on March 2, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2018-05014 Filed: 3/22/2018 8:45 am; Publication Date: 3/23/2018]